enerco / THE ORIGINAL Mr. Heater®
Subsidiaries of Enerco Group, Inc.

OPERATING INSTRUCTIONS AND OWNER'S MANUAL

Model # HS125NG / MH125LP / HS125LP

READ INSTRUCTIONS CAREFULLY: Read and follow all instructions. Place instructions in a safe place for future reference. Do not allow anyone who has not read these instructions to assemble, light, adjust or operate the heater.

CYLINDER NOT INCLUDED

GAS-FIRED INFRA-RED PORTABLE CONSTRUCTION HEATER

DO NOT LEAVE HEATER UNATTENDED OR IN OPERATION WHILE SLEEPING

GENERAL HAZARD WARNING:

FAILURE TO COMPLY WITH THE PRECAUTIONS AND INSTRUCTIONS PROVIDED WITH THIS HEATER CAN RESULT IN DEATH, SERIOUS BODILY INJURY AND PROPERTY LOSS OR DAMAGE FROM HAZARDS OF FIRE, EXPLOSION, BURN, ASPHYXIATION, CARBON MONOXIDE POISONING, AND/OR ELECTRICAL SHOCK.

ONLY PERSONS WHO CAN UNDERSTAND AND FOLLOW THE INSTRUCTIONS SHOULD USE OR SERVICE THIS HEATER.

IF YOU NEED ASSISTANCE OR HEATER INFORMATION SUCH AS INSTRUCTION MANUALS, LABELS, ETC., CONTACT THE MANUFACTURER.

WARNING:

FIRE, BURN, INHALATION AND EXPLOSION HAZARD. KEEP SOLID COMBUSTIBLES SUCH AS BUILDING MATERIALS, PAPER OR CARDBOARD A SAFE DISTANCE AWAY FROM THE HEATER AS RECOMMENDED BY THE INSTRUCTIONS. NEVER USE THE HEATER IN SPACES WHICH DO OR MAY CONTAIN VOLATILE OR AIRBORNE COMBUSTIBLES OR PRODUCTS SUCH AS GASOLINE, SOLVENTS, PAINT THINNER, DUST PARTICLES OR UNKNOWN CHEMICALS.

WARNING: NOT FOR HOME OR RECREATIONAL VEHICLE USE

SPECIFICATIONS

MODEL NO. ..... MH125LP/HS125LP HS125NG
GAS TYPE ..... LP-Gas ..... Natual Gas
MAX. INLET PRESSURE. ..... 14 IN. W.C. ..... 14 IN. W.C.
MIN. INLET PRESSURE ..... 13.5 IN. W.C. ..... 7 IN. W.C.
MANIFOLD PRESSURE ..... 12.5 IN. W.C. ..... 6 IN.W.C.

WARNING

DO NOT EXCEED ½ psi (14" w.c.) GAS PRESSURE TO THE GAS CONTROL VALVE.

VENTILATION

WARNING

THIS APPLIANCE IS UNVENTED AND MUST BE USED ONLY IN A WELL VENTILATED AREA.

The flow of combustion and ventilation air must not be obstructed. DO NOT use in a tightly enclosed area.

Any combustion process requires and consumes oxygen, and may produce carbon monoxide. This heater must be operated with adequate ventilation. Two openings directly to the outdoors must be provided, one low and one high, preferably on opposite sides of the area to be heated. Each of these openings must provide at least three square inches of combustion air-intake area and exhaust outlet area for every 1000 BTUs per hour of heater input rate in order to complete the combustion/ventilation process. Provide additional ventilation for any additional fuel-burning appliances and/or additional occupants.

CLEARANCE (Minimum clearances to combustible materials)

Do not exceed the gas supply pressures shown on rating plates. The maximum inlet gas supply pressures and minimum inlet supply pressures (for purposes of input adjustment) for LP-Gas and Natural gas are shown as follows:

MODEL NO.	BTU/HR RATING TYPE GAS		NORMAL OPERATING POSTION	CLEARANCES TO COMBUSTIBLES		
	NATURAL	LP-GAS		TOP	SIDES	BACK
MH125LP/ HS125LP		125,000*	VERTICAL	48"	60"	60"
HS125NG	125,000		VERTICAL	48"	60"	60"

*Tank size and tank temperature can directly affect BTU output

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FOR YOUR SAFETY

Do not use this heater in a space where gasoline or other liquids having flammable vapors are stored or used.

The heater is designed and approved for use as a construction heater under ANSI Z83.7 / CGA 2.14 - 2000

We cannot anticipate every use which may be made of our heaters. CHECK WITH YOUR LOCAL FIRE SAFETY AUTHORITY IF YOU HAVE QUESTIONS ABOUT APPLICATIONS.

Other standards govern the use of fuel gases and heat producing products in specific applications. Your local authority can advise you about these.

This appliance is intended to be used primarily for the heating of buildings under construction, alteration or repair.

THE STATE OF CALIFORNIA REQUIRES THE FOLLOWING WARNING:

WARNING

Combustion by-products produced when using this product contain carbon monoxide, a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm).

INSTALLATION INSTRUCTIONS GENERAL:

READ THESE INSTRUCTIONS CAREFULLY. Read and adhere to these instructions. DO NOT allow anyone who has not read these instructions to assemble, light, adjust or operate this heater.

DO NOT attempt to operate the heater with any gas other than that indicated on the heater nameplate.

For the U.S. and/or Canada, the installation of this appliance must comply with local and/or Provincial codes or, in the absence of these codes,

- With the (U.S.) National Fuel Gas Code, ANSI Z223.1 – Latest Edition (for Natural and LP-Gas operation, Models HS125NG, MH125LP, and HS125LP), and with the (U.S) Standard for the Storage and Handling of Liquefied Petroleum Gases, ANSI/NFPA 58 (for LP Gas operation, Model MH125LP, HS125LP), or
- with the current (Canadian) CAN/CGA B149.1 AND B149.2 INSTALLATION CODES.

This heater (including hose and regulator assembly if applicable) must be inspected before each use and at least annually by a qualified service person. If the hose for Model MH125LP/HS125LP shows evidence of excessive abrasion or wear, or if the hose is cut, it must be replaced prior to the heater being put into operation. The replacement hose assembly shall be that specified by the manufacturer. See the parts list.

LOCATION

The heater (and LP-Gas supply cylinder if applicable) must be located on a hard, flat, level surface to minimize the risk of accidental tipping. If an LP Gas supply cylinder is used (i.e. with Model MH125LP/HS125LP), the cylinder should be adequately restrained to prevent accidental tipping. **DO NOT operate this heater with the supply cylinder in any other than the upright position.**

This appliance must be installed only in locations where the potential for physical damage to the appliance (i.e., due to physical contact) is reduced to a minimum.

The installer must inform the owner/operator of this appliance that precautions must be taken to protect the appliance from physical damage.

This appliance produces radiant heat. Therefore, it must be located at least six feet away from any LP-Gas container and must not be directed toward any LP-Gas container within 20 feet.

The heater must be installed in a location such that it will not be exposed directly to water spray, rain, and/or dripping water.

Use of this heater in a draft/windy area decreases its efficiency. If possible, operate the unit in a draft free area.

PIPING

For Model MH125LP/HS125LP (for use with LP-Gas)

This model may be connected to a self-contained LP-Gas supply system using the hose and regulator assembly supplied with the appliance, OR, it may be connected to a permanently installed LP-Gas supply system.

If connected to a self-contained LP-Gas supply system, the hose assembly must be inspected prior to each use of the heater. If it is evident that there is excessive abrasion or wear, or if the hose is cut, it must be replaced prior to the heater being put into operation.

If connected to a self-contained LP-Gas supply system, the cylinder must have no less than a minimum capacity of 20 pounds and no more than a maximum capacity of 100 pounds of LP-Gas. DO NOT connect this appliance to a cylinder having less than a nominal 20 pounds capacity of LP-Gas. DO NOT connect this appliance to more than one (1) 100 pound cylinder.

WARNING

NEVER USE A FORK LIFT TRUCK TYPE CYLINDER.

The connection of Model MH125LP/HS125LP to an LP-Gas cylinder must be made in a well ventilated area using the regulator and hose assembly supplied with the appliance. **DO NOT attempt to adjust this regulator.** It has been preset at the factory to provide safe and proper operation of the appliance. Use a 7/8" open end wrench to connect the POL fitting (supplied with the LP regulator) to the LP-Gas cylinder. Turn the POL nut in a counter-clockwise direction (left hand thread) until tight. **DO NOT use pipe compound on POL threads.**

The heater must be located at least six feet away from any LP-Gas cylinder and must not be directed toward any LP-Gas cylinder within 20 feet. If more than one heater is used, they and the supply cylinders must be separated by at least 20 feet.

The gas supply must be turned off at the LP-Gas supply cylinder when the heater is not in use.

When the heater is to be stored indoors, the connection between the LP-Gas supply cylinder and the heater must be disconnected and the cylinder removed from the heater and stored in accordance with Chapter 5 of the Standard for the Storage and Handling of Liquefied Petroleum Gases. ANSI/NFPA 58 (U.S.) OR CAN/CGA B149.2 (Canada).

If connected to a permanently installed LP-Gas supply system, the system requires the use of a two-stage gas regulator assembly which is normally provided by your LP Gas dealer as part of the LP-Gas supply system. Consult with your local LP Gas dealer for details concerning proper equipment and installation.

For Model 200N (for use with natural gas)

Piping must be clean and free from scale or burrs.

Install regulator supplied with heater. Connect with 1/2" NPT nipple (not included) to Control Valve.

Connect the appliance to an appropriately designed and installed fuel supply system. This system must include an approved manual shut-off valve which is readily accessible and is located within six (6) feet of the appliance. Additionally, a sediment trap or drip leg must be located upstream of this manual shut-off valve. Refer to the appropriate (natural gas) installation code noted above. If a flexible connector is used, it must be of an approved type.

Before attempting to ignite the appliance, all gas fittings and connections must be thoroughly checked for gas leaks. Apply a small amount of a mild soap and water solution to all fittings and connections and observe for escaping bubbles. If any leaks are detected, shut off the gas supply to the appliance immediately. Wait a minimum of five minutes, repair the leak(s) and retest for leakage. Dry all fittings and connections after leak testing.

WARNING

NEVER USE A FLAME FOR GAS LEAK TESTING.

OPERATING INSTRUCTIONS

WARNING

IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY, OR LOSS OF LIFE.

CAUTION

THIS APPLIANCE IS HOT DURING NORMAL OPERATION, AVOID PHYSICAL CONTACT.

CAUTION

DO NOT PLACE CLOTHING OR OTHER COMBUSTIBLE MATERIALS ON THIS APPLIANCE.

DO NOT operate this heater if any part has been under water. Call a qualified service technician to inspect the appliance and to replace any part of the control system or gas control valve which has been under water.

This appliance must be installed and operated only in locations where the potential for physical damage to the appliance is reduced to a minimum. The owner/operator of this appliance must ensure that precautions are taken to protect the appliance from physical damage.

LIGHTING AND SHUT DOWN

Lighting the Heater

1 Before attempting the light the heater, smell all around the heater area for gas. Be sure to smell next to the floor because LP Gas is heavier than air and will settle on the floor. Turn on the gas supply to the appliance and check all fittings and connections for gas leaks using a mild soap and water solution. **NEVER use a match to check for gas leaks.** Should a gas leak occur, shut off the gas supply to the appliance immediately. Wait a minimum of five minutes before repairing the leak.

2 Use only the fuel intended for this appliance. Check the appliance rating plate for the correct fuel information.

3 Turn the gas valve knob clockwise to the "OFF" position. See Fig. 1 and Fig. 2 for location of appliance parts.

4 Wait a sufficient length of time (at least five minutes) to allow gas which may have accumulated in burner compartment to escape.

5 Turn on the main gas supply.

6 Turn the gas valve knob counter-clockwise to the "PILOT" position (see Fig. 1).

7a Depress and turn Control Knob counterclockwise to "Pilot" position and hold for 1-2 minutes. This may take longer to purge air from the supply hose depending on the length of the hose being used.

Depress red spark ignition button to light pilot flame (repeat until pilot lights) and continue to hold Control Knob at "Pilot" positionfor 30-60 seconds to enable Pilot Light Safety System.

Fully turn Control Knob to "Hi" position to light burner. ***or...***

7b To light the pilot, move the lighting hole cover aside (see Fig. 1) and place a lighted match into the hole. Depress the gas valve knob and hold while lighting and observing the pilot burner. Ensure that the pilot burner ignites from the match. Allow the pilot to burn approximately 30 seconds before releasing the gas valve knob. If pilot does not remain lighted, repeat the lighting operation allowing a longer period of time before releasing the gas valve knob.

NOTE: In cases where long runs of gas supply lines have been installed ahead of the appliance, it may be necessary to bleed trapped air out of the supply lines before lighting the pilot. New installations generally require bleed of supply lines. Wait a minimum of five minutes after bleeding the supply lines before attempting to light the heater.

Adjust pilot if necessary as noted under "Pilot Burner Adjustment."

8. Turn the gas valve knob counter-clockwise to the "ON" position (see Fig. 1). The burner will light. **DO NOT operate the heater in any other than the full "ON" position.**
9. **IMPORTANT: DO NOT attempt to adjust the main burner input using the main gas supply valve,** for this may cause the pilot and thermocouple to shut down the burner (Fig. 2).

Shut-down instructions:

To turn the heater OFF,

- For short periods of time, turn the main burner off by rotating the gas valve knob clockwise to the "PILOT" position.
- For extended periods of non use, turn the appliance completely off by rotating the gas valve knob clockwise to the "PILOT" position, depress the knob slightly, then rotate the knob fully clockwise to the "OFF" position. (Note: For Model 120L, also turn off the gas supply cylinder.)

Pilot burner adjustment:

1. Remove the pilot adjustment cap. The pilot adjustment cap is a slotted screw located in front of the "Pilot" designation stamped on top of valve body just below the gas valve knob.
2. Adjust the pilot key to provide properly sized flame. Rotate the key "clockwise" to decrease or "counter-clockwise" to increase flame.
3. Replace the pilot adjustment cap.

MAINTENANCE INSTRUCTIONS

This heater (including hose and regulator assembly if applicable) must be inspected before each use. If the hose for the Model 120L shows evidence of excessive abrasion or wear, or if the hose is cut, it must be replaced prior to the heater being put into operation. The replacement hose assembly shall be that specified by the manufacturer. See the parts list.

The appliance area must be kept free and clear of combustible materials, gasoline and other flammable vapors and liquids at all times.

The flow of combustion and ventilation air must not be obstructed.

Cleaning the heater:

Periodically, the heater must be cleaned of all dirt and dust particles.

⚠ DANGER

DO NOT ATTEMPT TO CLEAN THE HEATER WHILE IT IS OPERATING OR WHILE IT IS STILL HOT.

Turn the heater off and wait until it has completely cooled (at least 20minutes) before cleaning.

Clean the outside of the heater using a damp cloth. DO NOT clean the heater by spraying water on it. Wipe the outside of the heater off with a dry cloth after cleaning.

Clean the inside of the heater using compressed air. Blow air back and forth along all inside surfaces until all dust has been dislodged.

Clean the orifice of each burner with a #69 drill bit (for LP-Gas). Clean the orifice manually (by hand) – DO NOT use power drill.

Clean the thermocouple lead.

DO NOT operate this heater if any part has been under water. Call a qualified service person to inspect the appliance and to replace any part of the control system or gas control valve which has been under water.

This heater must be inspected at least annually by a qualified service person.

⚠ WARNING

Do not exceed ½ PSI gas pressure to appliance gas control valve.

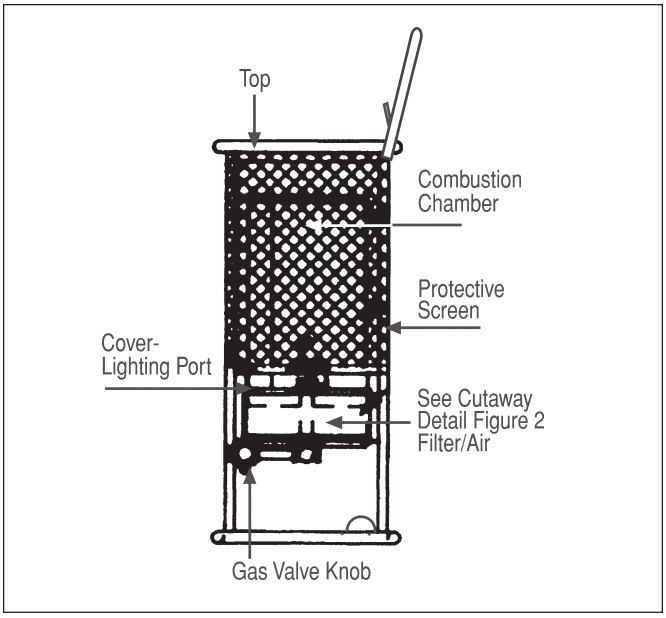


Figure 1

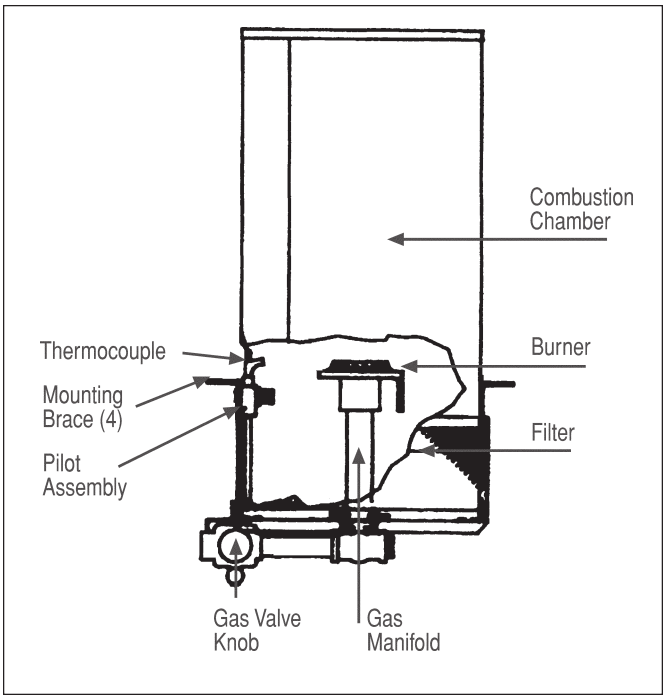
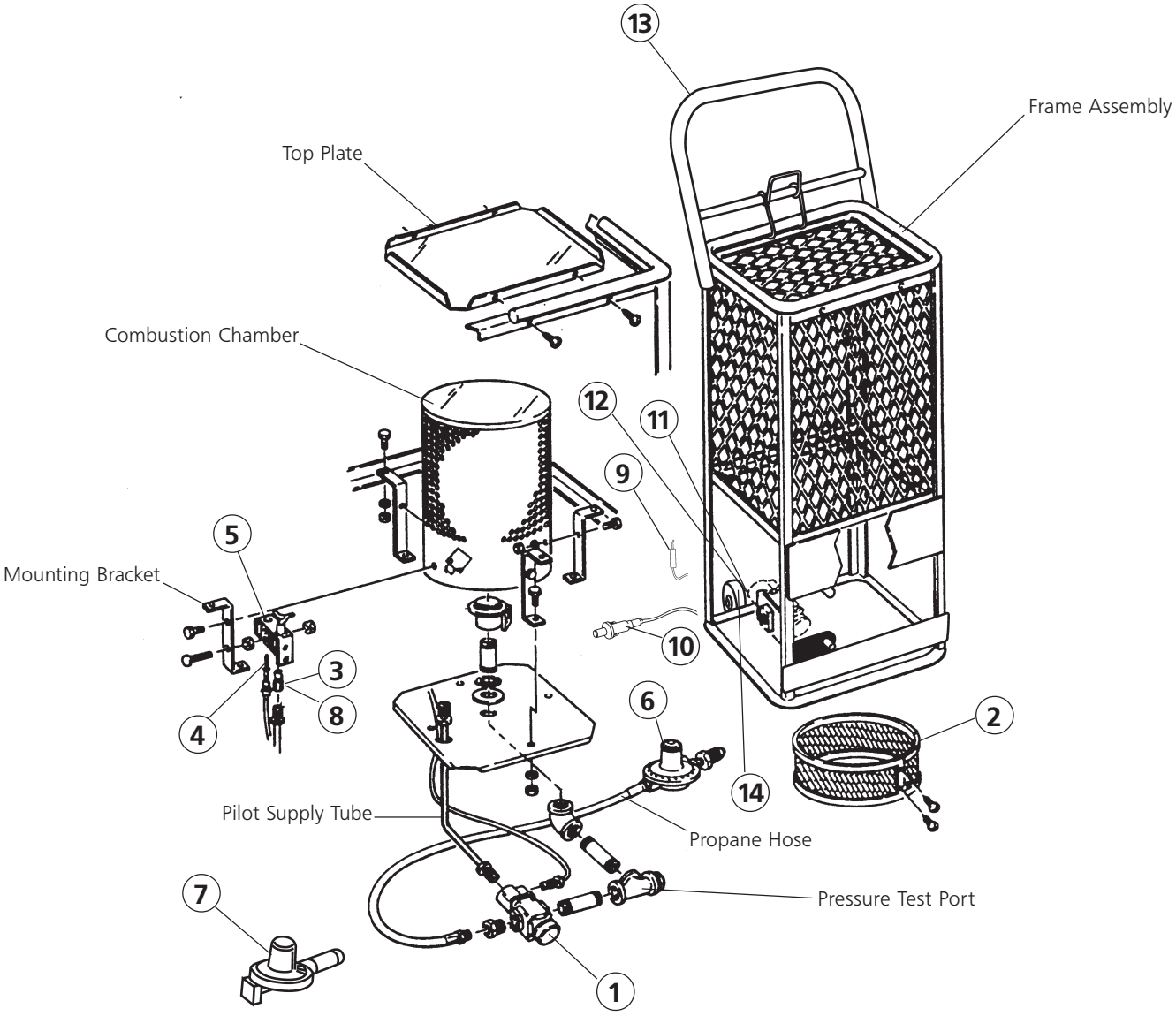


Figure 2

REPLACEMENT PARTS LIST FOR MODELS HS125NG / MH125LP / HS125LP

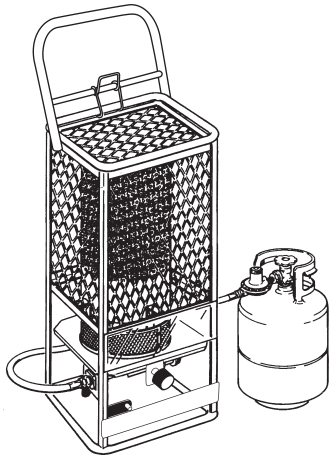
SEE BACK PAGE FOR PARTS ORDERING INFORMATION

REF. #	ITEM #	DESCRIPTION
1	00332	Manual Control Valve
2	04466	Filter/Diffuser
3	05363	Orifice Pilot(MH125LP/HS125LP)
4	09352	Thermocouple
5	11357	Pilot Burner
6	11695	Regulator (MH125LP/HS125LP)
7	11666	Regulator (HS125NG)
8	05374	Orifice Pilot (HS125NG)
9	CR805	Ignitor
10	CR835	Piezo
11	CR820	Axle
12	CR815	Axle Brackets
13	CR725	Handle
14	CR810	Wheel


13
Frame Assembly
Top Plate
Combustion Chamber
12
11
9
5
Mounting Bracket
10
3
8
4
6
2
14
Pilot Supply Tube
Propane Hose
7
Pressure Test Port
1

OPERATING INSTRUCTIONS AND OWNER'S MANUAL

Model # HS125NG / MH125LP / HS125LP



WARNING:

USE ONLY MANUFACTURER'S REPLACEMENT PARTS. USE OF ANY OTHER PARTS COULD CAUSE INJURY OR DEATH. REPLACEMENT PARTS ARE ONLY AVAILABLE DIRECT FROM THE FACTORY AND MUST BE INSTALLED BY A QUALIFIED SERVICE AGENCY.

PARTS ORDERING INFORMATION:

PURCHASING: Accessories may be purchased at any Mr. Heater or Enerco local dealer or direct from the factory

FOR INFORMATION REGARDING SERVICE

Please call Toll-Free 800-251-0001
www.mrheater.com

Our office hours are 8:30 AM – 5:00 PM, EST, Monday through Friday.

Please include the model number, date of purchase, and description of problem in all communication.

WARRANTY

Gas Fired Infra Red Portable Construction Heater HS125NG, MH125LP, & HS125LP

ENERCO/MR. HEATER warrants that Infra Red Heaters manufactured and sold will be free from defects in material and workmanship.

Parts assemblies controls, etc. furnished by ENERCO will carry a one (1) year warranty on the applicable warranties of the suppliers.

The sole responsibility of ENERCO under this warranty shall be to replace or repair any part for which a written claim is made to ENERCO within the time limit of this warranty which is returned upon request to ENERCO – F.O.B. Cleveland Ohio – or F.O.B. an ENERCO authorized service facility and which is proved to be defective upon inspection by ENERCO.

This warranty shall not apply to any part or product which has been subjected to misuse or neglect, damaged by accident, or rendered defective by reason of improper installation. THIS WARRANTY IS IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, and of any other responsibility of ENERCO for parts or products sold by ENERCO, including consequential or special damages.

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